Way 5

CLAIMS:

An isolated nucleic acid molecule comprising a poly- or oligonucleotide selected from the group consisting of:

- (a) a polynucleotide encoding a polypeptide having at least about 80% sequence identity with amino acids 25 to 236 of SEQ ID NO: 1;
- (b) a polynucleotide encoding a polypeptide having at least about 80% sequence identity with amino acids 25 to 214 of SEQ ID NO: 1;
- a polynucleotide encoding amino acids 25 to 236 of SEQ ID NO: 1, or a transmembrane domain deleted or inactivated variant thereof;
- (d) a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 2, and encoding a polypeptide having at least one biological activity of the polypeptide encoded by clone P00188 D12 (SEQ ID NO: 2);
- (e) a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 25 to 214 of SEQ ID NO: 1, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00188_D12 (SEQ ID NO: 2);
- (f) a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 25 to 230 of SEQ ID NO: 1, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00188_D12 (SEQ ID NO: 2);
 - (g) a polynucleotide of SEQ ID NO: 2;
 - (h) the complement of a polynucleotide of (a) (g); and
- (i) an antisense oligonucleotide capable of hybridizing with, and inhibiting the translation of, the mRNA encoded by a gene encoding a polypeptide of SEQ ID NO: 1, or another mammalian homologue thereof.
- 2. The polynucleotide of claim 1 encoding a polypeptide comprising amino acids 25 to 214 of SEQ ID NO: 1.
- 3. The polynucleotide of claim 1 encoding a polypeptide comprising amino acids 25 to 236 of SEQ ID NO: 1.

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4. The polynucleotide of claim 1 comprising the sequence of SEQ ID NO:

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5. A vector comprising and capable of expressing a poly- or oligonucleotide of claim 1.

- 6. A recombinant host cell transformed with nucleic acid comprising a poly- or oligonucleotide of claim 1.
 - 7. A recombinant host cell transformed with the vector of claim 5.

A method for producing a polypeptide comprising culturing a recombinant host cell transformed with nucleic acid comprising any of the polynucleotides of claim 1(a) - (g) under conditions such that the polypeptide is expressed, and isolating the polypeptide.

A polypeptide comprising:

- a polypeptide having at least about 80% identity with amino acids 25 to 236 of SEQ ID NO:1; or
- (b) a polypeptide encoded by nucleic acid hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 2;

the polypeptides of (a) and (b) having at least one biological activity of the polypeptide encoded by clone P00188_D12 (SEQ ID NO: 2).

- polypeptide having at least about 80% identity with amino acids 25 to 236 of SEQ ID NO:1; or (b) a polypeptide encoded by nucleic acid hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 2; wherein the polypeptides of (a) and (b) have at least one biological activity of the polypeptide encoded by clone P00188_D12/in admixture with a carrier.
- 11. The composition of claim 10 which is a pharmaceutical composition comprising an effective amount of said polypeptide in admixture with a pharmaceutically acceptable carrier.
- 12. The composition of claim 11 for the treatment of a cardiac, renal or inflammatory disease.
 - 13. An antibody specifically binding a polypertide of claim 9.
 - 14. An antagonist or agonist of a polypeptide of claim 9.
- 15. A composition comprising an antibody of claim 9 in admixture with a carrier.

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- 6. The composition of claim 15 which is a pharmaceutical composition comprising an effective amount of said antibody in admixture with a pharmaceutically acceptable carrier.
- 17.\ A composition comprising an antagonist or an agonist of a polypeptide of claim 9.\
- 18. The composition of claim 17 which is a pharmaceutical composition comprising an effective amount of said antagonist or said agonist in combination with a pharmaceutically acceptable carrier.
- 19. A method for the treatment of a cardiac, renal or inflammatory disease, comprising administering to a patient in need an effective amount of polypeptide of claim 9, or an antagonist or agonist thereof.
- A method for the treatment of a cardiac, renal or inflammatory disease, comprising administering to a patient in need an effective amount of an antibody specifically binding to a polypeptide of the present invention.
- A method for screening a subject for a cardiac, renal or inflammatory disease characterized by the differential expression of the polypeptide of SEQ ID NO: 1 or an endogenous homologue thereof, comprising the steps of:

measuring the expression in the subject of said polypeptide or said endogenous; and

determining the relative expression of said polypeptide or said endogenous homologue in the subject compared to its expression in normal subjects, or compared to its expression in the same subject at an earlier stage of development of the cardiac, renal or inflammatory disease.

- 22. The method of claim 21 wherein said subject is human and said endogenous homologue is a human homologue of the rat protein of SEQ ID NO: 1.
 - 23. An array comprising one or more oligonucleotides complementary to reference RNA or DNA encoding a protein of SEQ ID NO: 1 or another mammalian (e.g. human) homologue thereof, where the reference DNA or RNA sequences are obtained from both a biological sample from a normal subject and a biological sample from a subject exhibiting a cardiac, renal, or inflammatory disease, or from biological samples taken at different stages of a cardiac, renal, or inflammatory disease.

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A method for detecting cardiac, kidney, or inflammatory disease in a human test patient comprising the steps of:

providing an array of oligonucleotides at known locations on a substrate, which array comprises oligonucleotides complementary to reference DNA or RNA sequences encoding a human homologue of the protein of SEQ ID NO: 1, where the reference DNA or RNA sequences are obtained from both a biological sample from a normal patient and a biological sample from a patient potentially exhibiting cardiac, renal, or inflammatory disease, or from a test patient exhibiting cardiac, renal, or inflammatory disease, taken at different stages of such disease;

exposing the array, under hybridization conditions, to a first sample of cDNA probes constructed from mRNA obtained from a biological sample from a corresponding biological sample of a normal patient or from a test patient at a certain stage of the disease;

exposing the array, under hybridization conditions, to a second sample of cDNA probes constructed from mRNA obtained from a biological sample obtained from the test;

quantifying any hybridization between the first sample of cDNA probes and the second sample of cDNA probes with the oligonucleotide probes on the array; and

determining the relative expression of genes encoding the human homologue of the protein of SEQ ID NO: 1 in the biological samples from the normal patient and the test patient of in the biological samples taken from the test patient at different stages of the disease.

- 25. A diagnostic kit for the detection of a cardiac, kidney or inflammatory disease comprising an array of claim 23.
- 26. The diagnostic kit of claim 25 further comprising at least one of the following components:
 - (a) an oligonucleotide probe;
 - (b) a PCR reagent;
 - (c) a detectable label;
 - (d) a biological sample taken from a human subject;

- (e) an antibody to a polypeptide of SEQ ID NO: 1 or a further mammalian homologue thereof.
- 27. The magnostic kit of claim 24 wherein said biological sample is from blood or a tissue.
 - 28. The diagnostic kit of claim 27 wherein said tissue is a cardiac tissue.
- 29. The diagnostic kit of claim 28 wherein said cardiac tissue is a left ventricular tissue.

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